

IN THE CLAIMS:

Please amend claims as follows:

1. (original) Disc prosthesis for cervical vertebrae comprising:

- a first (2) and a second plate (3) intended to be fixed on neighboring cervical vertebrae,
- and means of articulation (7) inserted between the two plates placed in superimposed position, characterized in that the means of articulation (7) comprise:
 - means authorizing flexion-extension movements in the sagittal plane (S) according to an angular clearance limited by means of stop in flexion-extension (9),
 - means authorizing lateral inflexion movements in a plane perpendicular to the sagittal plane (S) according to an angular clearance limited by means of stop in lateral inflexion (12),
 - means authorizing relative rotation movements between the first (2) and second (3) plates according to an angular clearance limited by means of stop in relative rotation,
 - means of assembly (17) with the first (2) and second (3) plates so as to form a prosthesis consisting of a single piece.

2. (original) Disc prosthesis according to claim 1, characterized in that the means of articulation (7) comprise:

- a hole (20) with a partially spherical profile established inside a chamber (21) prepared in a plate,
- and a bearing surface (23) with a profile complementary to the hole (20) formed in the other plate and assembled in the hole (20) to be locked in the latter.

3. (once amended) Disk prosthesis according to claims 1 and 2, characterized in that the means authorizing flexion-extension movements comprising an axis (31) extend in the sagittal plane (S) by protruding on both sides of the bearing surface, in the clearances (32) prepared in the second plate by opening in the spherical hole.

4. (original) Disk prosthesis according to claim 3, characterized in that the clearances (32) have a determined diameter to enable definition of the angular clearance of the relative rotation movements between the first and second plates.

5. (original) Disk prosthesis according to claim 1, characterized in that the means of stop in relative rotation are formed by a female geometric shape (40) cooperating with a complementary male geometric shape (41), one of the geometric shapes being prepared on the first plate while the second geometric shape is prepared on the second plate.

6. (original) Disk prosthesis according to claim 1, characterized in that the means of stop in lateral inflexion (12) are formed by the profile of the plates coming into contact with each other.

7. (original) Prosthesis according to claim 2, characterized in that the bearing surface (23) is prepared in a first insert (25) assembled on the first plate (2) and made in the shape of a stub and that the hole (20) is prepared in the second insert (26) assembled on the second plate (3) and made in the shape of a ring.

8. (original) Disk prosthesis according to claim 7, characterized in that the inserts (25, 26) are made of ceramic or metal.

9. (new) Disk prosthesis according to claim 2, characterized in that the means authorizing flexion-extension movements comprising an axis (31) extend in the sagittal plane (S) by protruding on both sides of the bearing surface, in the clearances (32) prepared in the second plate by opening in the spherical hole.